AMENDMENTS TO THE CLAIMS

1.-45. (Cancelled).

46. (New) A nitride semiconductor device comprising an n-type semiconductor region comprising one or more nitride semiconductor layers, a p-type semiconductor region comprising one or more nitride semiconductor layers and an active layer of a nitride semiconductor between said n-type semiconductor region and said p-type semiconductor region,

wherein at least one nitride semiconductor layer in said n-type semiconductor region is an n-side super lattice comprising first and second nitride semiconductor layers, each of said first nitride semiconductor layers and each of said second nitride semiconductor layers being laminated alternately, said first nitride semiconductor layer has a higher band gap energy and a smaller concentration of the n-type impurity than said second nitride semiconductor layer.

47. (New) A nitride semiconductor device comprising an n-type semiconductor region comprising one or more nitride semiconductor layers, a p-type semiconductor region comprising one or more nitride semiconductor layers and an active layer of a nitride semiconductor between said n-type semiconductor region and said p-type semiconductor region,

wherein at least one nitride semiconductor layer in said p-type semiconductor region is a p-side super lattice comprising third and fourth nitride semiconductor layers, each of said third nitride semiconductor layers and each of said fourth nitride semiconductor layers being laminated alternately, said third nitride semiconductor layer has higher band gap energy and a smaller concentration of the p-type impurity than said fourth nitride semiconductor layer.

48. (New) A nitride semiconductor device comprising an n-type semiconductor region comprising one or more nitride semiconductor layers, a p-type semiconductor region comprising one or more nitride semiconductor layers and an active layer of a nitride semiconductor between said n-type semiconductor region and said p-type semiconductor region,

wherein at least one nitride semiconductor layer in said n-type semiconductor region is an n-side super lattice comprising first and second nitride semiconductor layers, each of said first nitride semiconductor layers and each of said second nitride semiconductor layers being laminated alternately, said first nitride semiconductor layer has a higher band gap energy and a smaller concentration of the n-type impurity than said second nitride semiconductor layer,

wherein at least one nitride semiconductor layer in said p-type semiconductor region is a p-side super lattice comprising third and fourth semiconductor nitride layers, each of said third nitride semiconductor layers and each of said fourth nitride semiconductor layers being laminated alternately, said third nitride semiconductor layer has a higher band gap energy and a smaller concentration of the p-type impurity than said fourth nitride semiconductor layer.

49. (New) The nitride semiconductor device according to claims 46 or 48, wherein the part of said second nitride semiconductor layer which is close to said first nitride semiconductor layer has a lower concentration of the n-type impurity than the part which is farther from the first nitride semiconductor layer.

50. (New) The nitride semiconductor device according to claims 46 or 48, wherein the concentration of the n-type impurity in said first nitride semiconductor layer is not more than $1 \times 10^{19}/cm^3$ and the concentration of the n-type impurity in said second nitride semiconductor layer ranges between $1 \times 10^{17}/cm^3$ and $1 \times 10^{20}/cm^3$.

51. (New) The nitride semiconductor device according to claims 46 or 48, wherein said first nitride semiconductor layers are made of

$Al_yGa_{1-y}N$ ($0<Y<1$) and said second nitride semiconductor layers are made of $In_xGa_{1-x}N$ ($0\leqq X<1$).

52. (New) The nitride semiconductor device according to claims 46 or 48, wherein said second nitride semiconductor layers are made of GaN.

53. (New) The nitride semiconductor device according to claims 46 or 48, wherein said first nitride semiconductor layers are made of $Al_xGa_{1-x}N$ ($0<X<1$) and said second nitride semiconductor layers are made of $Al_yGa_{1-y}N$ ($0<Y<1$, $X>Y$).

54. (New) The nitride semiconductor device according to claims 46 or 48, wherein said first nitride semiconductor layer or said second nitride semiconductor layer is not doped with an n-type impurity.

55. (New) The nitride semiconductor device according to claims 47 or 48, wherein the part of said fourth nitride semiconductor layer which is close to the third nitride semiconductor layer has a lower concentration of the p-type impurity than the part which is farther from the third nitride semiconductor layer.

56. (New) The nitride semiconductor device according to claims 47 or 48, wherein the concentration of the p-type impurity in said third nitride semiconductor layer is not more than $1 \times 10^{20}/cm^3$ and the concentration of the p-type impurity in said fourth nitride semiconductor layer ranges between $1 \times 10^{18}/cm^3$ and $1 \times 10^{21}/cm^3$.

57. (New) The nitride semiconductor device according to claims 47 or 48, wherein said third nitride semiconductor layers are made of $Al_yGa_{1-y}N$ $(0<Y<1)$ and said fourth nitride semiconductor layers are made of $In_xGa_{1-x}N$ $(0 \leqq X<1)$.

58. (New) The nitride semiconductor device according to claims 47 or 48, wherein said fourth nitride semiconductor layers are made of GaN.

59. (New) The nitride semiconductor device according to claims 47 or 48, wherein said third nitride semiconductor layers are made of $Al_xGa_{1-x}N$ $(0<X<1)$ and said fourth nitride semiconductor layers are made of $Al_yGa_{1-y}N$ $(0<Y<1,\ X>Y)$.

60. (New) The nitride semiconductor device according to claims 47 or 48, wherein said third nitride semiconductor layer or said fourth nitride semiconductor layer is not doped with an n-type impurity.

61. (New) A nitride semiconductor device comprising an n-type semiconductor region comprising one or more nitride semiconductor layers, a p-type semiconductor region comprising one or more nitride semiconductor layers and an active layer of a nitride semiconductor between said n-type semiconductor region and said p-type semiconductor region,

wherein at least one nitride semiconductor layer in said n-type semiconductor region is an n-side super lattice comprising first and second nitride semiconductor layers, each of said first nitride semiconductor layers and each of said second nitride semiconductor layers being laminated alternately, said first nitride semiconductor layers having different concentrations of n-type impurity from those of said second nitride semiconductor layers, said first nitride semiconductor layers being made of $Al_xGa_{1-x}N$ ($0<X<1$) and said second nitride semiconductor layers being made of GaN.

62. (New) A nitride semiconductor device comprising an n-type semiconductor region comprising one or more nitride semiconductor layers, a p-type semiconductor region comprising one or more nitride semiconductor layers and an active layer of a nitride semiconductor between said n-type semiconductor region and said p-type semiconductor region,

wherein at least one nitride semiconductor layer in said p-type semiconductor region is a p-side super lattice comprising third and fourth nitride semiconductor layers, each of said third nitride semiconductor layers and each of said fourth nitride semiconductor layers being laminated alternately, said third nitride semiconductor layers having different concentrations of p-type impurity from those of said fourth nitride semiconductor layers, said third nitride semiconductor layers being made of $Al_xGa_{1-x}N$ ($0<X<1$) and said fourth nitride semiconductor layers being made of GaN.

63. (New) A nitride semiconductor device comprising an n-type semiconductor region comprising one or more nitride semiconductor layers, a p-type semiconductor region comprising one or more nitride semiconductor layers and an active layer of a nitride semiconductor between said n-type semiconductor region and said p-type semiconductor region,

wherein at least one nitride semiconductor layer in said n-type semiconductor region is an n-side super lattice comprising first and second nitride semiconductor layers, each of said first nitride semiconductor layers and each of said second nitride semiconductor layers being laminated alternately, said first nitride semiconductor layers having different concentrations of n-type impurity from those of said second nitride semiconductor

layers, said first nitride semiconductor layer being made of $Al_xGa_{1-x}N$ (0<X<1), said second nitride semiconductor layer being made of GaN,

wherein at least one nitride semiconductor layer in said p-type semiconductor region is a p-side super lattice comprising third and fourth nitride semiconductor layers, each of said third nitride semiconductor layers and each of said fourth nitride semiconductor layers being laminated alternately, said third nitride semiconductor layers having different concentrations of p-type impurity from those of said fourth nitride semiconductor layers, said third nitride semiconductor layer being made of $Al_xGa_{1-x}N$ (0<X<1), said fourth nitride semiconductor layers being made of GaN, respectively.

64. (New) The nitride semiconductor device as in one of claims 46-48, 61-63, wherein said device is a laser device comprising an active layer between a p-type cladding layer and an n-type cladding layer, and

at least one of said p-type cladding layer and said n-type cladding layer is said n-side super lattice layer or said p-side super lattice layer.

65. (New) The nitride semiconductor device according to claim 64, wherein said device is a laser device, and

an optical waveguide layer made of a nitride semiconductor containing In or GaN which has an impurity concentration of not more than 1 x $10^{19}/cm^3$ which is formed at least either between said p-type cladding layer and said active layer or between said p-type cladding layer and said active layer.